

**IMPROVED SOLAR POWER COLLECTION WITH NEAR INFRARED
WIDEBAND REFLECTOR COATING**

ABSTRACT OF THE DISCLOSURE

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[0035] A near infrared (NIR) wideband reflector coating designed to start reflecting solar energy wavelengths from at least 1.2 microns in a typical geosynchronous earth orbit or medium earth orbit satellite and from at least 1.3 microns in a typical low earth orbit satellite. Also, the (NIR) wideband reflector
10 coating reflects solar energy wavelengths below 0.35 microns in all three applications. This invention works on triple junction (TJ) solar cells. The performance of at least 1.2-microns is on solar panels with near-normal incident solar angle, typical of Geosynchronous Earth Orbit (GEO) and Medium Earth Orbit (MEO) satellites. The performance of at least 1.3-microns is on solar
15 panels with wide range of incident solar angles, a design requirement for Low Earth Orbit (LEO) satellites.